DEPARTMENT of ENVIRONMENTAL SERVICES Water Supply & Pollution Control Division - Biology Bureau

LAKE TROPHIC DATA

MORPHOMETRIC:

Lake: WADLEY F	FALLS	Lake Area (ha):	8.09
Town: L	LEE	Maximum depth (m):	0.6
County: S	Strafford	Mean depth (m):	0.3
River Basin: C	Coastal	Volume (m³):	22000
Latitude: 4		Relative depth:	0.2
Longitude: 7	71°00'32" W	Shore configuration:	-
Elevation (ft)): 80	Areal water load (m/yr):
Shore length ((m): 1200	Flushing rate (yr ⁻):	
Watershed area	a (ha):	P retention coeff.:	·
% watershed po	onded:	Lake type: ar	tificial

BIOLOGICAL:	13 February 1996	3 August 1995
DOM. PHYTOPLANKTON (% TOTAL) #1	NO PHYTOPLANKTON	NO NET PHYTOPLANKTON
#2	SAMPLE COLLECTED	SAMPLES COLLECTED
#3		
PHYTOPLANKTON ABUNDANCE (units/mL)		3.000
CHLOROPHYLL-A (µg/L)		29.98
DOM. ZOOPLANKTON (% TOTAL) #1	NO ZOOPLANKTON	NO NET ZOOPLANKTON
#2	SAMPLE COLLECTED	SAMPLES COLLECTED
#3		
ROTIFERS/LITER		
MICROCRUSTACEA/LITER		
ZOOPLANKTON ABUNDANCE (#/L)		
VASCULAR PLANT ABUNDANCE		Scattered
SECCHI DISK TRANSPARENCY (m)		0.5 Visible on bottom
BOTTOM DISSOLVED OXYGEN (mg/L)	13.7	7.4
BACTERIA (E. coli, #/100 ml) #1		10
#2		25
#3		

SUMMER THERMAL STRATIFICATION:

not stratified

Depth of thermocline (m): None Hypolimnion volume (m^3) : None Anoxic volume (m^3) : None

CHEMICAL: Lake: WADLEY FALLS Town: LEE					
	13 Febru	13 February 1996 3 August 19		95	
DEPTH (m)	1.0		0.5		:
pH (units)	6.1		6.8		
A.N.C. (Alkalinity)	6.0		18.4		
NITRATE NITROGEN	0.23		< 0.10	, , , , , , , , , , , , , , , , , , , ,	
TOTAL KJELDAHL NITROGEN	0.20		0.65		
TOTAL PHOSPHORUS	0.014		0.031		
CONDUCTIVITY (µmhos/cm)	107.2		159.5		
APPARENT COLOR (cpu)	50		65		
MAGNESIUM			1.62		
CALCIUM			7.8		
SODIUM			19.2		
POTASSIUM			1.61		
CHLORIDE	22		37		
SULFATE			4		
TN : TP	31		21		
CALCITE SATURATION INDEX			2.3		

All results in mg/L unless indicated otherwise

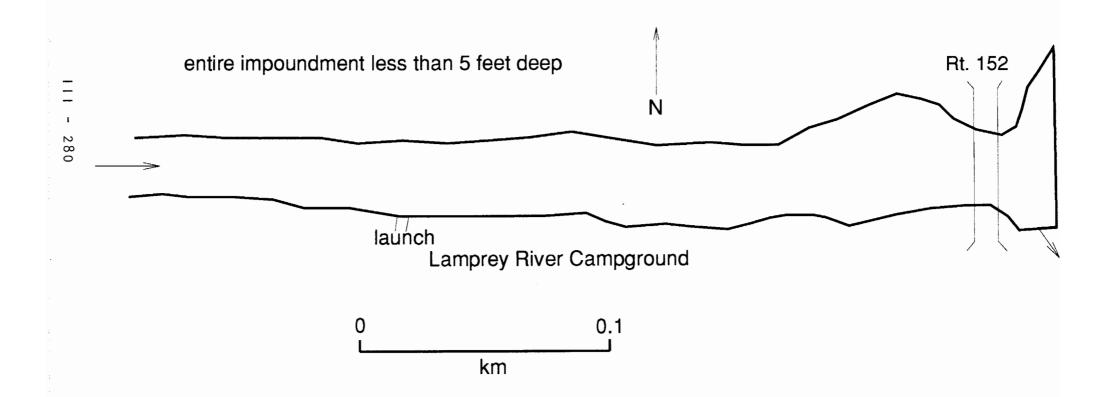
TROPHIC CLASSIFICATION: 1995

Ι	0.0.	S.D.	PLANT	CHL	TOTAL	CLASS
	**	4	1	5	10	Eutro.

COMMENTS:

- 1. This is an artificial impoundment on the Lamprey River. It was surveyed at the request of the Surface Water Quality Bureau, but is not considered to be a pond. It is a run-of-the-river type impoundment that was less than a meter deep.
- 2. Net plankton samples were not collected (too shallow) but the chlorophyll level was relatively high. Filamentous green algae were common along the bottom and clumps of algae were observed floating in the water (perhaps fragments of filamentous algae).
- 3. Trophic points for secchi disk transparency are misleading because the disk was visible on bottom at 0.5 meters. A trophic rating of mesotrophic may be more accurate for this impoundment.
- 4. Lamprey River Campground was located along the southern shore of the impoundment. Canoe was launched from this area.
- 5. The watershed area was not determined and related morphometric data were not calculated.

Wadley Falls Lee



FIELD DATA SHEET

LAKE: WADLEY FALLS

DATE: 08/03/95

TOWN: LEE

WEATHER: OVERCAST

	DEPTH (M)	TEMP (°C)	*DISSOLVED OXYGEN	OXYGEN SATURATION
	0.2	25.0	7.4	89 %

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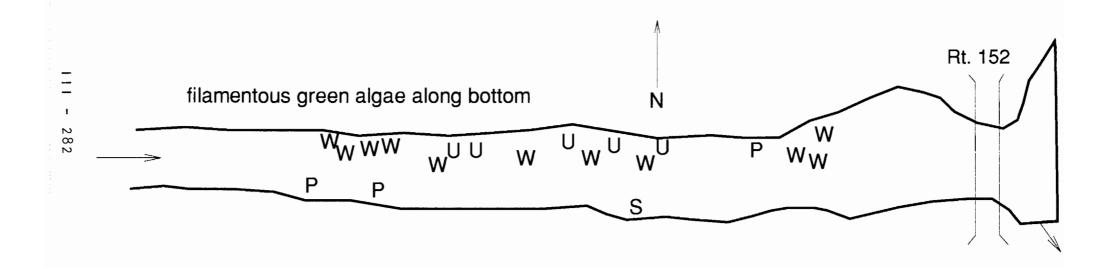
SECCHI DISK (m): 0.5 VOB COMMENTS:

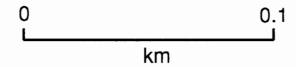
BOTTOM DEPTH (m): 0.5

TIME: 1100

*Dissolved oxygen values are in mg/L

Wadley Falls Lee





AQUATIC PLANT SURVEY

LAKE	: WADLEY	FALLS	TOWN:	LEE	DATE:	08/03/95

	T	DITE: 00/03/93	
Key	PLANT		
	GENERIC	COMMON	ABUNDANCE
U	Utricularia	Bladderwort	Sparse
W	Potamogeton	Pondweed	Scattered
P	Pontederia cordata	Pickerelweed	Sparse
S	Sparganium	Bur reed	Sparse
	Chlorophyceae	Filamentous green algae	Common
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		- WWW	
	1.174		
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OVERALL ABUNDANCE: Scattered

GENERAL OBSERVATIONS:

- 1. Filamentous green algae were very common along most of the bottom. This algae included Spirogyra, Mougeotia and Hydrodictyon.
- 2. Clumps of algae were also floating in and on the water.
- 3. Some duckweed was also observed